

Notice of Allowability

Application No.

09/737,564

Examiner

Pedro J. Cuevas

Applicant(s)

HIGASHINO ET AL.

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on February 20, 2003.
 2. ☒ The allowed claim(s) is/are 1,2 and 5-10.
 3. ☐ The drawings filed on _____ are accepted by the Examiner.
 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the.
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
 6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1, 2, and 5-10 are allowed.
2. The following is an examiner's statement of reasons for allowance.

Umeda et al. clearly teaches the construction of a stator for an alternator, the stator comprising:

a cylindrical stator core formed circumferentially with a number of slots extending axially; and

a stator winding composed of a three-phase stator winding portion constructed by connecting three winding phase portions into a three-phase star connection, each of the winding phase portions being installed in the stator core by sequentially inserting strands of wire into the slots at predetermined intervals, wherein:

each of the strands of wire having a rectangular cross section constituting the three winding phase portions is led out from a coil end group of the stator winding to an outer side to constitute a neutral-point terminal;

each of the neutral-point terminals has a flat side surface portion;

a neutral-point joint portion of the stator winding is constructed by abutting and electrically joining the flat side surface portions of the neutral-point terminals;

the neutral-point terminals of the strands of wire constituting the three winding phase portions comprise:

a first neutral-point terminal positioned centrally in a circumferential direction, the first neutral-point terminal being led axially outwards from the coil end group to constitute a neutral-point lead portion connected to the rectifier, and

second and third neutral-point terminals positioned on first and second sides in the circumferential direction, each being led axially outwards from the coil end group, then bent, and led around to the first neutral-point terminal;

at least a part of the neutral-point terminals extending from the coil end group to the outer side is secured to the coil end group by means of an electrically-insulating resin portion; and

the electrical joining is welding.

Shichijyo et al. teach the construction of a rectifier arrangement of vehicle AC generator having:

a connecting member, which constitutes a neutral-point lead portion and composed of a conductor having flat side surface portions, being electrically connected to the rectifier for the purpose of electrically connecting the stator coils neutral point to the rectifier.

The prior art of record, taken alone or in combination, fails to teach the construction of a stator for an alternator as described on independent claims 1 and 10, having:

a connecting member including a conductor having flat side surface portions, said flat side surface portions of said neutral-point terminals and said connecting member

being abutted and electrically joined to each other to form a neutral-point joint portion of said stator winding, (claim 1); or

said side surface portions of said first, second and third neutral-point terminals being abutted and electrically joined where said first, second and third neutral-point terminals are stacked in the axial direction to form a neutral-point joint portion of said stator winding (claim 10).

Dependent claims 2 and 5-9 are considered allowable by their dependence on allowed independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramirez can be reached on (703) 308-1371. The fax phone numbers for

Application/Control Number: 09/737,564
Art Unit: 2834

Page 5

the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Pedro J. Cuevas
May 9, 2003